

IN THE CLAIMS:

Please cancel claim 21 without prejudice.

Please amend claim 22 as indicated below.

A listing of the status of all claims 1-23 in the present patent application is provided below.

1. (Original) A method for end-to-end admission control of real-time packet flows in a network having a plurality of network elements, the method comprising:

transmitting at least one probe packet from a first network element to a second network element via a network path;

determining, at at least one intermediate network element on the network path, at least one flow rate associated with a plurality of packets;

marking at least one predetermined bit in the at least one probe packet if the at least one flow rate is greater than a predetermined rate; and

controlling an admission of additional packets into the network based at least in part on the marking of the at least one predetermined bit in the at least one probe packet.

2. (Original) The method according to claim 1 further comprising denying the admission of the additional packets into

the network if the at least one predetermined bit in the at least one probe packet is marked.

3. (Original) The method according to claim 1 further comprising: transmitting at least one second probe packet from the second network element to the first network element via the network path;

marking at least one second predetermined bit in the at least one second probe packet if the at least one flow rate is greater than a second predetermined rate; and

controlling the admission of the additional packets into the network based at least in part on the marking of the at least one second predetermined bit in the at least one second probe packet.

4. (Original) The method according to claim 3, where the first network element echoes information associated with the at least one second predetermined bit in the at least one second probe packet in a transmission to the network.

5. (Original) The method according to claim 1, where the admission of the additional packets is based at least in part on priorities or importance of the plurality of packets and the

additional packets.

6. (Original) The method according to claim 1, wherein the admission of the additional packets into the network is controlled by an entity that controls the network.

7. (Original) The method according to claim 1, where information associated with the at least one predetermined bit in the at least one probe packet is communicated to at least one of the first network element and the second network element.

8. (Original) The method according to claim 1, where the at least one intermediate network element is part of a bandwidth-limited path in the network.

9. (Original) The method according to claim 1, where the plurality of packets comprise real-time packets.

10. (Original) The method according to claim 1, where the plurality of packets comprise Internet Protocol (IP) packets.

11. (Original) The method according to claim 10, where the plurality of packets comprise voice over IP packets.

12. (Original) The method according to claim 10, where the plurality of packets comprise video over IP packets.

13. (Original) The method according to claim 10, where the plurality of packets comprise real-time multimedia over IP packets.

14. (Original) The method according to claim 10, where the at least one predetermined bit is part of a Differentiated Services field in an IP header of the at least one probe packet.

15. (Original) The method according to claim 1, where the predetermined rate is based on a network bandwidth allocated for the plurality of packets.

16. (Original) The method according to claim 15, where the predetermined rate is raised to a value above the allocated network bandwidth for a predetermined period of time.

17. (Original) The method according to claim 1 further comprising encoding the at least one predetermined bit in the at least one probe packet based at least in part on the at least

one flow rate.

18. (Original) The method according to claim 17 further comprising discontinuing at least one packet flow based on the encoded at least one predetermined bit.

19. (Original) The method according to claim 17 further comprising lowering a transmission rate between the first network element and the second network element or between any two network endpoints.

20. (Original) The method according to claim 17 further comprising suspending packet transmissions without terminating the connection between the first network element and the second network element or between any two network endpoints.

21. (Cancelled)

22. (Currently Amended) At least one processor readable ~~carrier~~ medium for storing a computer program of instructions configured to be readable by at least one processor for instructing the at least one processor to execute a computer process for performing the method as recited in claim 1.

23. (Original) A system for end-to-end admission control of real-time packet flows in a network, the system comprising:

a first network element that transmits at least one probe packet to a second network element via a network path;

at least one intermediate network element on the network path that

determines at least one flow rate associated with a plurality of packets, and

marks at least one predetermined bit in the at least one probe packet if the at least one flow rate is greater than a predetermined rate; and

an admission control module that controls an admission of additional packets into the network based at least in part on an examination of the at least one predetermined bit in the at least one probe packet.